Request to Archive
With The National Centers for Environmental Information
For Global Biomass Burning Emissions Product from Geo and Polar Satellites
Provided by NESDIS>OSDPD>OSPO

2015-04-10

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

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2. Name the organization or group responsible for creating the dataset.

NESDIS>OSDPD>OSPO

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

The GBBEPx product is to produce daily biomass burning emissions (PM2.5, BC, CO, CO2, OC, and SO2) released from wildfires using fire radiative power. It is the average of AOD-adjusted GBBEP-Geo emissions and QFED (Quick Fire Emission Dataset) emissions. QFED extracts FRP from both Terra MODIS and Aqua MODIS data in each grid cell and areal proportion of cloud mask. GBBEP-Geo emissions are produced using half-hourly FRP retrieved from a network of multiple geostationary satellites. Products Capabilities as following:

Coverage: Global
Accuracy: 30%
Horizontal Resolution: 0.25 Degree

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2015-06-01
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

N/A

6. Approximate date when the dataset was or will be released to the public:

2015-04-16

7. Who are the expected users of the archived data? How will the archived data be used?

NWS/NCEP/EMC land group and global forecasting group.

NWS/NCEP is developing capabilities to provide global aerosol forecasts. The global model needs biomass burning emissions sources (fires) as input. There is a need for timely update of emissions on an daily basis globally. The global

biomass burning emissions product from a network of geostationary satellites and quick fire emissions data from polar-orbiting satellites of Terra and Aqua MODIS will fit this requirement.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?
The users have fully participated the product development process including CDR, ORR.

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?
N/A

10. List the input datasets and ancillary information used to produce the data.
GOES Fire products for Product Generation:
GOES-W&-E Fire (ASCII)
Meteosat-9 Fire (ASCII)
MTSAT Fire (ASCII)

Polar Satellite MODIS Data for Product Generation
Terra MODIS: MOD14 & MOD03 (hdf)
Aqua MODIS: MYD14 & MYD03 (hdf)
Ancillary Data for Product Generation
Emission factors
Scaling factors
Climatological diurnal pattern in FRP
IGBP land cover

11. List web pages and other links that provide information on the data.
https://sandia-intranet.nesdis.noaa.gov/BBEP/GBBEPx.html

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
1. User Manuals, System Maintenance Manual, ATBD

13. Indicate the data file format(s).
1. netCDF-4

14. Are the data files compressed?
No

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).
GBBEP_Geo.Hourly_emissions.001.YYYYMMDD.nc4
GBBEPx.emis_PM25.001.YYYYMMDD.nc4
GBBEPx.emis_BC.001.YYYYMMDD.nc4
GBBEPx.emis_CO.001.YYYYMMDD.nc4
GBBEPx.emis_CO2.001.YYYYMMDD.nc4
GBBEPx.emis_OC.001.YYYYMMDD.nc4

GBBEPx.emis_SO2.001.YYYYMMDD.nc4

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

From our Anonymous ftp server:

ftp://satepsanone.nesdis.noaa.gov/FIRE/GBBEPx/

17. What is the total data volume to be submitted?

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 50MB per Day
Data File Frequency: 7 per Day
Data Production Start: 2015-04-15

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

New version of the products is expected from VIIRS.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: Suitland, MD
System Name: NSOF
System Owner: OSPO
Additional Information:

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL
2. FTP PUSH
3. SFTP PUSH

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. User interface to order and stage data for download
2. Direct download links

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Biomass burning emissions have direct and immediate impacts on air quality and weather conditions which are major environmental risks to human health. They also have impacts on carbon budgets because of the large amount of aerosols and trace gases released into the atmosphere. Global biomass burning emissions have been requested by various users. EPA has requested the product for air quality monitoring. The NOAA/NWS National Center for Environmental Prediction (NCEP) is enhancing its Global Forecasting System (GFS) by including biomass burning aerosols and the availability of this information in near-real time is critical for weather and air quality forecasting.

24. Are the data archived at another facility or are there plans to do so? Please explain.

No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

No

26. Do you have a data management plan for your data?

No

27. Have funds been allocated to archive the data at NCEI?

No

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

N/A

29. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by:	2015-06-01
Accessible by:	2015-07-01

30. Add any other pertinent information for this request.

None